

AMSAT News Service Weekly Bulletins
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SB SAT @ AMSAT \$ANS-207.01
KITSAT-A STATUS

HR AMSAT NEWS SERVICE BULLETIN 207.01 FROM AMSAT HQ
SILVER SPRING, MD JULY 25, 1992 BID:\$ANS-207.01
TO ALL RADIO AMATEURS BT

G0/K8KA Provides KITSAT-A Status From Kourou, French Guiana

Half way through the KITSAT-A launch campaign, the spacecraft checkout has gone smoothly. All of the spacecraft subsystems and payloads have been tested, and other than finding a lizard in one of the tool boxes, there have been no surprises. Five engineers from Surrey Satellite Technology (UoSAT), six from Korean Institute of Science and Technology (KAIST) and a few from MATRA and CNES (France) are preparing two UoSAT developed micro-satellites for launch.

KITSAT-A will possess a new CCD camera, a store-and-forward transponder, radiation experiments and digital signal processing facilities in the amateur satellite service. The second satellite is called "S80-T" was built commercially by the UoSAT/SSTL team at Surrey for MATRA Espace, a large French aerospace firm, who are in turn contracting for CNES, the French space agency. S80-T is not an amateur satellite, but will conduct experiments for CNES outside the amateur bands.

The launch campaign plan is much the same as that used on previous AMSAT launches with Ariane. The satellites and ground support equipment are flown into French Guiana's main airport in Cayenne, then transported to the "Centre Spatial Guianaise" (CSG) which is about 100 km north up the coast near the city of Kourou. This is an outpost of highest technology between the jungle and the sea, with Devil's Island just off the coast.

At CSG, the teams are given a clean room large enough to hold all the AMSAT spacecraft ever launched, but too small to be of any concern (or trouble) to the owners of the main payload. In this case, the primary satellite being launched is TOPEX/POSEIDON, an oceanographic survey mission jointly funded by the NASA and CNES.

Once set up in the clean room, the microsatellite team starts to systematically check out their satellites. For the UoSAT bus, this thorough checkout involves testing dozens of "back door" data paths which will only be used in emergencies, but which must nevertheless be tested. For KITSAT, we have also taken pictures with both CCD cameras, broadcast speech and data from the digital signal processing experiment, and taken background readings from the radiation monitor. These tests kept us occupied last week.

This week, the final physical preparations will be carried out. Inside the satellite, all cables and harnesses will be wrapped with special RFI shielding (known in French as "papier d'aluminium por les poulets roti"). The exterior surfaces of the satellite -- used for thermal control -- are also prepared. Each available area is covered by a tape with specific thermal characteristics. The heat absorption and radiation properties of these areas will keep the satellite within its temperature limits. This is particularly critical for the KITSAT orbit, which is sometimes in full sunlight, and sometimes 30% eclipsed.

Mechanical details -- the preparation of cables to connect the satellite to

the "Ariane Structure for Auxiliary Payloads" (ASAP) and the compression of the attach fitting spring which will eject KITSAT from the ASAP -- are also under way.

We now have 5 days to prepare the satellite for Monday's mating with the rocket. (Working on "le weekend" is frowned upon, and we move quickly during to week so that we can sample the delights of the jungle on Saturday and Sunday). If all goes smoothly, the satellites will both be ready to go on Friday night, and we will come in on Monday morning for the final activities. I will file a report later to bring you up to date -- if I can get a good data line to civilization.

Jeff Ward (G0/K8KA)

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SB SAT @ AMSAT \$ANS-207.02
AMSAT-NA SPACE SYMPOSIUM INFO

HR AMSAT NEWS SERVICE BULLETIN 207.02 FROM AMSAT HQ
SILVER SPRING, MD JULY 25, 1992 BID:\$ANS-207.02
TO ALL RADIO AMATEURS BT

AMSAT-NA Space Symposium Scheduled For October 9-11th In Washington, D.C.

All individuals who are interested in space and amateur radio satellites are invited to attend this year's exciting AMSAT-NA Annual Meeting and Space Symposium to be held at the international headquarters of INTELSAT in Washington, D.C. It's a perfect opportunity to catch up on the latest developments in the design of Phase-3D as well as digital techniques for use on PACSATs and other amateur radio applications. The Space Symposium will begin mid-day Friday, October 9, 1992 with registration, informal get-togethers and tutorials. In addition a special AMSAT/ARRL Education Workshop will be held on Friday afternoon and will be conducted by Rosalie White (W1ST0). A full schedule of talks for beginners, experienced users and other interested people will continue on Saturday, October 10th.

Saturday evening, following the "now famous" attitude readjustment hour, a banquet buffet will be served in the beautiful and spacious INTELSAT lobby. Also, you will get a chance to meet the new AMSAT-NA Board of Directors (BOD) during a question and answer session. In addition, those individuals who have made important contributions to AMSAT-NA during the past year will be recognized.

This is a perfect time of the year to spend some time with your family in our nation's capital discovering something of our past while looking into the future of amateur radio. For more information about lodging and registration, contact AMSAT-NA Headquarters at (301) 589-6062. Those who have received your advanced registration form with the BOD ballot, can fax your registration in at (301) 608-3410.

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SB SAT @ AMSAT \$ANS-207.03
A0-13 OPERATIONS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 207.03 FROM AMSAT HQ
SILVER SPRING, MD JULY 25, 1992 BID:\$ANS-207.03
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AMSAT-NA A0-13 Operations Net Schedule

AMSAT Operations Nets are planned for the following times. Mode B Nets are conducted on A0-13 on a downlink frequency of 145.950 MHz and Mode J/L on a downlink of 435.970 MHz.

Date	UTC	Mode	Phs	NCS	Alt
1-Aug-92*	1500	B	57	VE2LVC	W90DI
8-Aug-92*	1900	B	65	W7NQM	W5IU
15-Aug-92	1300	B	105	WB6LL0	W90DI
22-Aug-92	1435	J	55	WA5ZIB	WJ9F

* Thanks to W90DI for the off-pointing alert and subsequent change.

Guest commentators are planned. Join the Net if you have questions. In the unlikely event that either the Net Control Station (NCS) or the alternate NCS does not call on frequency, any participant is invited to act as the NCS.

Slow Scan Television On A0-13

The SSTV net will meet on a downlink frequency of 145.925 MHz, Mode B at MA 165, UTC Sundays. Also try Mode J, UTC Saturdays at MA 165, on a downlink frequency of 435.980 MHz. Try the various AMSAT Nets for scheduling at other times.

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SB SAT @ AMSAT \$ANS-207.04
F0-20 MODE JA TRANSPONDER SCHED

HR AMSAT NEWS SERVICE BULLETIN 207.05 FROM AMSAT HQ
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F0-20 Mode JA Transponder Schedule

Fuji-OSCAR-20 is in Mode JA every Wednesday. The following are the frequencies for the Mode JA passband:

F0-20 Mode JA Transponder Frequencies

Telemetry Beacon	435.795 MHz (CW)
Mode JA Uplink	145.900 - 146.000 MHz (SSB, CW)
Mode JA Downlink	435.800 - 435.900 MHz (SSB, CW, Inverting)

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SB SAT @ AMSAT \$ANS-207.05
SUMMER A0-13 TRANSPONDER SCHED

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A0-13 Late Summer Schedule Announced

The current schedule for A0-13 is as follows:

N QST 1992 May 08 A0-13 Transponder Schedule Jun 10 - Jul 20
Mode-B : MA 000 to MA 165 ! Mode-JL on Mon, Wed !
Mode-JL : MA 165 to MA 200 ! Fri and Sat UTC only. ! Alon/Alat
Mode-LS : MA 200 to MA 215 ! S Beacon on "L" days ! 150/0
Mode-B : MA 215 to MA 256 ! S Transp on "B" days +-----/
Omnis : MA 250 to MA 060 ! Mode L OFF after Jun 29 until
Aug 17. Next attitude change Jul 20, to 150/0 until Sep 21.
73 de Peter DB20S, James G3RUH and Graham VK5AGR.

--->PLEASE NOTE THAT A0-13 IS IN CONTINUOUS MODE B UNTIL AUGUST 17TH<---

A0-13 Transponder Schedule 1992 Aug 17 - Sep 21

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Mode-B : MA 0 to MA 40 ! from 1992 Aug 17 until Sep 21
Mode-S : MA 40 to MA 50 !<- S transponder; B trsp. is OFF!
Mode-LS : MA 50 to MA 55 !<- S beacon + L transponder
Mode-JL : MA 55 to MA 70 ! This schedule operates
Mode-B : MA 70 to MA 256 ! every orbit, every day.
Omnis : MA 160 to MA 10 ! Alon/Alat 150/0
Please DON'T uplink to Mode B MA during 40-50; it interferes with Mode S.
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Calendar Of Events For A0-13 To The End Of 1992

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Date           Event           Modes   Sun Angle   Suns Position
                                           SEL/SAZ
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1992 Jul 20 [Mon] Move to 150/0  B  --  -    43 to 44   -34/176
1992 Aug 17 [Mon] JLS ON        B  JL  S     28     -26/208
1992 Sep 21 [Mon] Move to 180/0  B  JL  S    -1 to 29   -2/241
1992 Nov 23 [Mon] Move to 210/0  B  JL  S   -29 to -4   33/305
1992 Dec 14 [Mon] JLS OFF        B  --  -    -27     33/333
1992 Dec 28 [Mon] t.b.a.         B  --  -     43     29/351
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A0-10 is currently available for Mode B operation when it is view of your QTH. PLEASE DO NOT attempt to use A0-10 if you hear the beacon or the transponder signals FMinG.

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